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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/069,346	06/13/2002	Arne Sele	021645-000100US	7814	
20000	7590 08/06/2003 ND AND TOWNSEND	AND CREW, LLP	EXAMINER		
TWO EMBAR EIGHTH FLO	CADERO CENTER	BEACH, THOMAS A			
SAN FRANCI	SCO, CA 94111-3834		ART UNIT	PAPER NUMBER	
			3671		
			DATE MAILED: 08/06/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.		Applicant(s)	- 0-				
•		10/069,346		SELE ET AL.	0,40				
Office Action Summary		Examin r		Art Unit					
		Thomas A Beach		3671					
	The MAILING DATE of this communication appears on the cover sheet with the correspond nce address								
Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status	Responsive to communication(s) filed on								
1) 🗌	·	· his action is non-f	īnal						
2a)∐ —				rosecution as to t	he merits is				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Disposition of Claims									
	<ul> <li>4) ☐ Claim(s) 11-30 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> </ul>								
,	5)⊠ Claim(s) <u>21-30</u> is/are allowed.								
6)⊠ Claim(s) <u>11-14, 16, 17, and 19</u> is/are rejected.									
7)⊠ Claim(s) <u>15,18 and 20</u> is/are objected to.									
8) Claim(s) are subject to restriction and/or election requirement.  Application Papers									
	The specification is objected to by the Examin	er.							
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.									
12) The oath or declaration is objected to by the Examiner.									
,	Priority under 35 U.S.C. §§ 119 and 120								
13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a) ☐ All b) ☐ Some * c) ☐ None of:									
1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.									
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).									
1	a) The translation of the foreign language provisional application has been received.								
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.									
Attachment(s)									
1) Noti	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) rmation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) [ 5) [ ) 6) [		ary (PTO-413) Paper Il Patent Application (					
U.S. Patent and	Trademark Office	Action Summary		Part of Paper No.	8				

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#### **DETAILED ACTION**

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "tether tensioning means" and the "sacrificial anodes" and "must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Horton 4,740,109. Horton shows a hybrid riser configuration having a submerged tower (figure 1) comprising a plurality of riser pipes 44 inserted in guide conduits 76 and having buoyancy means 30 and tethering means 40 in which the risers and the guides are connected to a anchored base 36 where the guide conduits act as tethers and a radial constraint in elastic spiral deformation of the riser pipe inside (figures 13-15 & 17).

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Horton shows the riser pipes and the guide conduits rigidly connected to the buoyancy means 52 and the base (figure 22; claim 12).

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horton 4,740,109 in view of Fisher et al 4,188,156. Horton does not disclosed that the guides are made of aluminum; however, Fishers shows a similar riser configuration (figures 1-3) where aluminum is used to construction of guide 20 for conduit 50. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Norton, as taught by Fisher, to include guides made of aluminum since it is a widely recognized material used in subsea riser because of its properties of being lightweight (col. 3, lines 7-9; col. 4, lines 1-9).
- 6. Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horton 4,740,109 in view of Engel 4,415,293. Horton does not shows sacrificial anodes; however, Engel shows a similar subsea riser configuration (figure 1) where sacrificial anodes 25 are used to reduce corrosion of the riser 23 (col. 4, lines 47-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Norton, as taught by, to include sacrificial anodes prolong

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the usefulness of the riser by preventing excess corrosion from developing that would require downtime for repairs which is very costly.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horton 4,740,109 and Fisher et al 4,188,156, as applied to claim 13, further in view of Engel 4,415,293. The combination does not shows sacrificial anodes; however, Engel shows a similar riser configuration where sacrificial anodes are used to reduce corrosion of the riser (col. 4, lines 47-53). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination, as taught by, to include sacrificial anodes prolong the usefulness of the riser by preventing excess corrosion from developing that would require downtime for repairs which is very costly.

### Allowable Subject Matter

- 8. Claims 15, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 9. Claims 21-30 are allowed.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A Beach whose telephone number is 703.305.4848. The examiner can normally be reached on Monday-Thursday, 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 703.308.3870. The fax phone numbers for the organization where this application or proceeding is assigned are 703.872.9352 or 703.872.9326 for regular communications and 703.872.9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.306.4198.

Thomas A. Beach

Supervisory Patent Examiner

Group 3600